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Sheet 1 of 4

Form PTO-14
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PHN 14-746R

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09/899,091

Applicant

INNMINK SCHOUHAMER ET AL.

Filing Date

7 JULY 5, 2001

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INFORMATION DISCLOSURE CITATION

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U.S. PATENT DOCUMENTS

Ex. Int		Document Number	Date	Name	Class	Sub- class	Filing Date If Approp.
P/P	AA	4 4 9 9 4 5 4	2/1985	SHIMADA	340	347	
	AB	4 5 3 9 6 9 1	9/1985	OGAWA	375	37	
	AC	4 8 1 1 3 6 1	3/1989	BACOU ET AL.	371	37	
	AD	5 1 9 8 8 1 3	3/1993	ISOZAKI	341	59	
	AE	2 9 5 7 9 4 7	10/25/60	BOWERS	179	15.6	
	AF	3 8 5 5 4 2 6	12/17/74	BOUWHUIS	179	100.3V	
	AG	4 0 2 0 2 8 2	4/26/77	HALPERN	178	68	
	AH	4 1 4 6 9 0 9	3/27/79	BECKENHAUER ET AL.	360	39	
	AI	4 2 6 1 0 1 9	4/7/81	MCCLELLAND	360	40	
	AJ	4 3 2 3 9 3 1	4/6/82	JACOBY	360	40	
	AK	4 3 8 7 3 6 4	6/7/83	SHIROTA	340	347 DD	
	AL	4 4 1 0 8 7 7	10/18/83	CARASSO ET AL.	340	347 DD	
	AM	4 4 1 3 2 5 1	11/1/83	ADLER ET AL.	340	347 DD	
	AN	4 4 1 4 6 5 9	11/8/83	BECKERS	369	59	
	AO	4 4 3 7 0 8 6	3/13/84	MILLER ET AL.	340	347 DD	
	AP	4 4 5 6 9 0 5	6/26/84	ODAKA	340	347 DD	
	AQ	4 4 6 3 3 4 4	7/31/84	ADLER ET AL.	340	347 DD	
	AR	4 5 0 1 0 0 0	2/19/85	INMINK ET AL.	375	25	
	AS	4 5 1 7 5 5 2	5/14/85	SHIROTA ET AL.	340	347 DD	
	AT	4 5 2 0 3 4 6	5/28/85	SHIMADA	340	347 DD	
	AU	4 5 3 6 7 4 2	8/20/85	SCHOUHAMER INMINK	340	347 DD	
	AV	4 5 7 3 0 3 4	2/25/86	SCHOUHAMER INMINK	340	347 DD	
	AW	4 6 1 7 5 2 6	10/14/86	HIKAWA ET AL.	331	1 A	
	AX	4 6 2 0 3 1 1	10/28/86	SCHOUHAMER INMINK	375	19	
	AY	4 6 4 1 1 2 8	2/3/87	SCHOUHAMER INMINK	340	347 DD	
	AZ	4 6 7 5 6 5 0	6/23/87	COPPERSMITH ET AL.	340	347 DD	
P/P	BA	4 6 8 3 5 7 2	7/28/87	BAGGEN ET AL.	371	37	



BB	4	6	9	7	1	6	7	9/29/87	O'KREFFER ET AL.	340	347 DD
BC	4	7	2	8	9	2	9	3/1/88	TANAKA	340	347 DD
BD	4	7	7	9	0	7	2	10/18/88	VAN GESTEL	341	59
BE	4	8	3	3	4	7	0	5/23/89	IKETANI	341	59
BF	4	8	5	1	8	3	7	7/25/89	BALDWIN	341	55
BG	4	8	5	5	7	4	2	8/8/89	VERBOOM	341	102
BH	4	9	8	8	9	9	9	1/29/91	URHARA ET AL.	341	59
BI	5	0	1	6	2	5	8	5/14/91	TANAKA ET AL.	375	25
BJ	5	0	4	8	0	0	3	9/10/91	BAGGEN ET AL.	369	59
BK	5	1	3	6	4	3	6	8/4/92	KARLMAN	360	40
BL	5	1	9	6	8	4	8	3/23/93	SAKAZAKI	341	58
BM	5	2	0	6	6	4	6	4/27/93	SAKO ET AL.	341	95
BN	5	2	2	9	9	8	6	7/20/93	MIZOKAMI ET AL.	369	59
BO	5	2	4	1	3	0	9	8/31/93	CIDECIYAN ET AL.	341	59
BP	5	3	3	3	1	2	6	7/26/94	FUKUDA ET AL.	369	59
BQ	5	3	4	1	1	3	4	8/23/94	BENJAUTHERIT	341	58
BR	5	3	6	5	2	3	1	11/15/94	NIIMURA	341	58
BS	5	3	7	5	2	4	9	12/20/94	CHO	395	800
BT	5	4	5	1	9	4	3	9/19/95	SATOMURA	341	58
BU	5	6	2	7	5	9	2	5/6/97	TICHELAAR ET AL.	348	429
BV	5	6	4	2	1	1	3	6/24/97	SCHOUGHAMER IMMINK	341	58
BW	5	6	9	2	0	2	1	11/25/97	WALKER	375	354
BX	5	9	2	0	2	7	2	7/6/99	SCHOUGHAMER IMMINK	341	59
PI/P BY	5	6	9	6	5	0	5	12/9/97	SCHOUGHAMER IMMINK	341	59

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FOREIGN PATENT DOCUMENTS

		Document Number										Date	Country	Class	Sub-class	Trans.	
		Yes	No														
P/P	BZ	0	3	4	7	9	3	4	A	2	12/1989	EUROPE	G11B	20/14			
	CA	0	4	9	3	0	4	4	A	2	12/1991	EUROPE	H03M	7/14			
	CB	2	2	6	7	4	1	6			1/1993	UNITED KINGDOM	H03M	7/00			
	CC	3	6	0	5	3	9	6	A	1	27/8/87	GERMANY	H03M	7/14			
	CD	0	0	5	9	2	2	4	A	1	8/9/82	EUROPE	G11B	5/09			
	CE	0	1	4	3	0	0	5	A	2	29/5/85	EUROPE	H03M	5/14			
	CF	0	1	9	3	1	5	3	A	2	3/9/86	EUROPE	G11B	20/14			
	CG	0	3	1	0	0	4	1	A	2	5/4/89	EUROPE	H03M	5/14			
	CH	0	5	0	6	4	4	6	A	1	30/9/92	EUROPE	H03M	5/14			
P/P	CI	2	0	9	4	1	0	7	A		8/9/82	UNITED KINGDOM	H04L	3/02			



CJ CK CL CM CO CP CQ CR	2	1	1	1	8	0	5	A	6/7/83	UNITED KINGDOM	H04L	25/49			
	2	1	4	1	9	0	6	A	3/1/85	UNITED KINGDOM	H03K	13/24			
	0	2	1	1	4	7	2	4	26/4/90	JAPAN	H03M	7/14			
	0	4	1	6	7	6	2	4	15/6/92	JAPAN	H03M	5/06			
	0	6	2	1	8	8	0	7	3	17/8/87	JAPAN	G11B	20/14		
	6	2	2	8	3	7	1	9	9/12/87	JAPAN	H03M	7/14			
	6	3	0	1	8	8	2	2	26/1/88	JAPAN	H03M	7/14			
	6	3	1	7	3	2	7	4	16/7/88	JAPAN	G11B	20/12			

OTHER (Including Author, Title, Date, Pertinent Pages, Etc.)

719 CS		"A New Look-Ahead Code for Increasing Data Density," by Jacoby, G.V., IEEE Trans. Magn., vol. MAG-13, no. 5, pp. 1202-4, Sept. 1977.
CT		"A Rate 2/3, (1,6) RLL Code" by R.L. Adler, R.K. Brayton, M. Hassner, and B.P. Kitchens, IBM Techn. Discl. Bul., vol. 27, pp. 4727-4729, 1985.
CU		"A Rotary-head High-Density Digital Audio Tape Recorder" by H. Nakajima and K. Odaka, IEEE Trans. Consum. Electron., vol. CE-29, pp. 430-437, Aug. 1983.
CV		"A Survey of Coding Schemes for Transmission or Recording of Digital Data" by H. Kobayashi, IEEE Trans. Commun., vol. COM-19, pp. 1087-1099, Dec. 1971.
CW		"Algorithms for Sliding Block Codes. An Application of Symbolic Dynamics to Information Theory", by R.L. Adler, D. Coppersmith, and M. Hassner, IEEE Trans. Inform. Theory, vol. IT-29, no. 1, pp. 5-22, Jan. 1983.
CX		"Alternative Modulation Codes for the Compact Disc" by C. French and J. Wolf, IEEE Trans. on Consum. Electron., Nov. 1988, Vol. 34, No. 4, pp.908-913.
CY		"An Analysis Of DC Free Property On Run-Length Limited Code" by S. Tazaki, T. Kaji & H. Osawa 1986 Dummy Tijdschrift 1986 Vol. 67 pp. 151-156.
CZ		"An Analysis Of DC Free Property On Run-Length Limited Code" Video audio and data recording sixth international conference Publ. No. 67 PP.151-156 Publ. London UK 1986 214 PP. B04.
DA		"Binary Code Suitable for Line Transmission" by J.M. Griffiths, Electronics Letters, vol. 5, pp.79-81, 1969.
DB		"Binary Two-thirds Rate Code with Full Word Look-Ahead" by G.V. Jacoby and R. Kost, IEEE Trans. Magn., vol. MAG-20, no. 5, pp. 709-714, Sept. 1984.
DC		"Channel Codes for Digital Video Recording" by J.L.E. Baldwin, Institution of Electronic Radio and Engineers, Fifth International Conference on Video and Data Recording, University of Southampton, England, April 1984, Proceedings No. 59, pp.67-77.
DD		"Coding Diagrams In Hard Disks" by Badell, C.M., Mundo Electron. (Spain), no.184, pp.63-4,67,68. May 1988.
DE		"Coding for Constrained Channels: A Comparison of Two Approaches" by P.A. Franzaszek, IBM J. Res. Develop., vol. 33, no. 6, 602-608, Nov. 1989.
DF		"Coding Techniques for Digital Recorders" by K.A. Schouhamer Immink, 1991, ISBN 0-13-140047-9.
DG		"Constructions of Almost Block-Decodable Runlength-Limited Codes" by K.A.S. Immink, IEEE Trans. Inform. Theory, vol. 41, no. 1, pp. 284-287, Jan. 1995.
DH		"Finite-State Modulation Codes for Data Storage", by B.H. Marcus, P.H. Siegel, and J.K. Wolf, IEEE Journal on Selected Areas in Communications, vol. 10, no. 1, pp. 5-37, Jan. 1992.
DI		"Low-disparity Binary Coding System" by R.O. Carter, Electronics Letters, vol. 1, pp. 65-68, May 1965.
DJ		"Low-Frequency Suppression In RLL Codes For Optical Recording" by M. Mattavelli, Eight International Conference on Video, Audio and Data Recording. (Conf. Publ. No. 319), IEE, vii+182 PP., PP.109 15 1990.
DK		"Mark Generation In 2,7 Code", by H.J. Gardner and W.A. Overby. IBM Technical Disclosure Bulletin Dec 1984 Vol. 27 No. 7B pp. 4274-4277.
DL		"Modulation and Coding for Information Storage" by P.H. Siegel and J.K. Wolf, IEEE Commun. Magazine, vol. 29, no. 12, pp. 68-86, Dec. 1991.
DM		"Modulation Systems For Digital Audio Discs With Optical Readout", by KA Immink. ICASSP 81 proceedings of the 1981 IEEE Int. Conf. on Acoustics Speech and Signal Processing PP 587-589.
719 DN		"Optimal Codes for Digital Magnetic Recording" by J.C. Mallinson and J.W. Miller, Radio and Elec. Eng., vol. 47, pp. 172-176, 1977.



DO	"Optimization Of Low-Frequency Properties Of Eight-To-Fourteen Modulation" by K.A. Schouhamer Immink, U. Gross. Radio & Electron. Eng. (GB), vol.53, no.2, PP.63-6, Feb. 1983.
DP	"Prefix-Synchronized Run-Length-Limited Sequences" by K.A.S. Immink, H. Hollmann, IEEE on Selected Areas in Communications, VOL.10, NO. 1, Jan. 1992, p.214-222.
DQ	"Principles of Digital Line Coding" by K. Cattermole, Int. J. Electron., vol. 55, pp. 3-33, July 1983.
DR	"Recording Codes for Digital Magnetic Storage" by P.H. Siegel, IEEE Trans. Magn., vol. MAG-21, no. 5, pp. 1344-1349, Sept. 1985.
DS	"Run-Length Reduction of 3PM Code via Look-Ahead Technique" by M. Cohn and G.V. Jacoby, IEEE Trans. Magn., vol. MAG-18, pp. 1253-1255, Nov. 1982.
DT	"Sliding-Block Coding for Input-Restricted Channels" by R. Karabed and B.H. Marcus, IEEE Trans. Inform. Theory, vol. IT-34, no. 1, pp. 2-26, Jan. 1988.
DU	"The EFM Recording Code" by Dusek, K., Sdelovaci Tech. (Czechoslovakia), vol. 32, no.5, PP.177-8, May 1984.
DV	"Waveform Compression in NRZI Magnetic Recording" by M. Berkoff, Proceedings. IEEE, vol. 52, pp. 1271-1272, Oct. 1964.
DW	"Zero-Modulation Encoding in Magnetic Recording" by A.M. Patel, IBM J. Res. Develop., vol. 19, pp. 366-378, July 1975.
P/P DX	"Other Invention Disclosure Statement" May 8, 2003
Examiner <u>P. Jeanpierre</u> Date Considered <u>10/27/04</u>	
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